

C. 4442  
Cambridgeshire County Council.

---

EDUCATION COMMITTEE

---

ANNUAL REPORT

OF THE

SCHOOL MEDICAL OFFICER

FOR THE YEAR ENDING 31st DECEMBER, 1936

## INDEX.

---

	PAGE
Blind, Deaf, Defective and Epileptic Children .. ...	22
Closure of Schools ... ..	19
Co-operation ... ..	21
Co-ordination ... ..	3
Dental Defect and Treatment ... ..	10, 15, 19, 24, 26, 28
“ Following-up ” ... ..	11
Health Education ... ..	27
Heart Disease and Rheumatism ... ..	10
Hospital Treatment ... ..	19
Hygienic Condition of Premises ... ..	3
Infectious Diseases, Control of ... ..	19
Malnutrition ... ..	6, 11, 25
Meals, Provision of ... ..	20
Medical Inspection and Treatment ... ..	5, 11
Mental Deficiency ... ..	23
Milk, Supply of ... ..	11
Minor Ailments ... ..	14
Miscellaneous ... ..	27
Neglect ... ..	19
Nose and Throat Defects ... ..	9, 15
Orthopaedic Defects ... ..	10, 17, 26
Parents' Payments ... ..	27
Remedial Measures ... ..	11
School Nurses ... ..	11, 14
Secondary Schools, Medical Inspection in ... ..	23
Skin Diseases ... ..	10
Speetales ... ..	15
Staff ... ..	3
Tuberculosis ... ..	10, 18
Uncleanliness ... ..	8, 14
Visual Defects ... ..	9, 14, 24, 26
APPENDIX. Report by School Dentists ... ..	28

Tables :—

Medical and Dental I. to V. (prescribed by Board of Education) 32—40

## Introduction.

At the end of 1936 there were 124 Public Elementary Schools under the control of the County Education Committee (55 Provided and 69 Non-Provided), comprising 125 separate departments. The average number of children on the school registers for the year ended March 31st, 1936, was 8,739, the average number in attendance being 7,951.

## Staff.

Services in connection with school medical work were rendered by the following:—

\*R. FRENCH, M.D., D.P.H., *School Medical Officer and Medical Officer of Health.*

\*T. H. HARRISON, M.B., Ch.B., D.P.H., *Assistant do.*

\*W. PATON PHILIP, M.C., M.B., D.P.H., D.M.R.E., *Tuberculosis Officer.*

FRANK ROBINSON, M.D., D.P.H., *Acting School Medical Inspector (to January 31st).*

\*J. C. G. EVERED, L.D.S. (Edin.), *School Dental Surgeon.*

\*N. G. CLEMENTS, L.R.C.P.S., L.R.F.P.S., L.D.S., *Do.*

W. H. HARVEY, M.D., *Bacteriologist.*

J. C. W. GRAHAM, M.D., *Ophthalmic Surgeon.*

E. H. EZARD, M.D., D.Sc., *Ophthalmic Referee.*

MISS A. GRAHAM, *Superintendent of County Nursing Association.*

\*G. G. GALPIN, *Chief Clerk and Enquiry Officer under the Mental Deficiency Acts.*

\* Whole-time Officers of the County Council.

## Co-ordination.

The details of the arrangements for securing co-ordination between the various branches of the Education and Public Health services and of the other services provided by the County Council have been set out in many previous reports. They remain unchanged and repetition is unnecessary.

## Hygienic Condition of Premises.

The Buildings Sub-Committee of the Education Committee have given detailed consideration to the state of many schools throughout the year, with the result that the progressive improvement in the hygienic state of the schools as a whole has been continued. While it cannot be expected that every small school in a rural area can approximate to the hygienic standard of large schools in urban areas, it cannot be gainsaid that there are still a number of schools where there is room for further improvement. It is perhaps unfair to single out particular schools for mention in this regard, but it may be said that a particularly unsatisfactory state of affairs at West Wratting School was considered by the Sub-Committee during 1936, and the attention of the

Managers was drawn to it. In this school the roofs were leaky, the ventilation poor and the lighting was obstructed by trees on the opposite side of the road. The offices were in a bad state of repair and there was a complete absence of playground, the children having both to play and carry out physical exercises on the public highway, with frequent interruption by passing traffic, to say nothing of the dangers resulting from it.

Two points of special interest in the policy of the Committee have been the decisions to buy a large amount of school furniture, especially for the replacement of unhygienic desks, by the raising of a loan as an alternative to the piecemeal replacement which has taken place in previous years, resulting in the prolonged retention of old-fashioned furniture in many schools, and to proceed with the improvement of a large number of playgrounds by means of another loan.

Among improvements to individual schools may be noted the resolutions to instal main water supplies at Harston, Over, Great Chishill and Abington; to convert the existing closets to pail closets at Arrington, Isleham and Horseheath and in the last case to replace the existing brick floor by a concrete one; and to supply two additional radiators in the infants' room at Bassingbourn and a small hot water heating apparatus at Litlington as well as to improve the heating at Whittlesford and Dry Drayton. The office accommodation was increased at Toft, but unfortunately it has been decided that the improvements in the offices at Fulbourn mentioned as having been under consideration last year must be postponed. Electric light is being installed at Great Abington and Willingham and it has been arranged to level 450 square yards of ground at Orwell and cover with tarmacadam for use as a playground by the Council and Church of England schools jointly.

The new Junior School at Fen Ditton was brought into use on January 6th, 1936. It is designed on modern open air lines, having two classrooms which can be thrown entirely open on one side and opened to more than half of their extent on the other side. The system of ventilation is ingeniously devised so that a varying amount of window and door space can be opened to suit the prevailing climatic conditions at a given moment. The heating is by means of panels in the ceiling and has proved satisfactory.

At the end of the year the new Village College and Junior School built on the same site at Bottisham were practically complete and were brought into use immediately after the Christmas holidays. From the medical point of view, perhaps the most interesting feature is the clinic attached to the Junior School, but intended to be used, of course, by children from both schools, as well as by mothers and children under school age in the form of premises for an Infant Welfare Centre. This clinic was made possible by a generous gift by the Halley Stewart Trust and is known as the Halley Stewart Clinic. It comprises a large waiting room which can also be used for lectures to mothers, a dressing room, a consulting room, fully equipped for refraction work, and a bathroom. Both consulting room and dressing room have wash basins with hot and



cold water laid on and in the dressing room there is also a sink which makes it possible for the room to be used as a recovery room by children who have received dental treatment.

The Village College provides a senior school for a large number of surrounding villages, transport being arranged where necessary. Needless to say, it is designed on modern open air lines and it is possible to throw open all classrooms freely in good weather. All classrooms get the benefit of the morning sun, but during the hottest part of the day in summer are not exposed to direct sun, while in winter the maximum benefit is obtained from the available sunlight. The heating is of the "under-floor" type. In the cloakrooms circular washing fountains have been provided instead of individual basins and there are also shower baths. Water closets are fitted throughout and the sewage is efficiently treated by means of a private disposal plant.

There is also a part of the premises set aside as an educational and social centre for adults.

### Medical Inspection.

The three prescribed age groups have been inspected during the year and the usual annual re-inspection has been carried out in all but a few cases. Owing, however, to the extra time occupied by the nutritional survey suggested by the Board of Education, it has not been possible to re-inspect every school within the period. The Board suggested that the time occupied by the nutritional survey would be negligible, but in practice this has been found to be far from the case and extra visits to the schools have been necessary in many instances in order to carry it out. It is not proposed to repeat the survey every year, so that it is expected that it will be possible to re-inspect every school during 1937 as has been done in the past.

Dr. Robinson continued to act as School Medical Inspector during the first month of 1936, but on February 1st Dr. T. H. Harrison, who had been appointed as successor to the late Dr. J. H. Gellatly, commenced his duties and carried out school medical inspection in all the elementary schools of the County for the rest of the year.

The numbers examined will be found in Table I. appended to this report, the principal totals being:—

Routine examinations	...	...	2,816
Specially presented	...	...	317
Re-examinations	...	...	2,052

A comparison with the figures for 1935 shows that there has been a rise in the number of routine and special examinations and a very marked fall in the number of re-examinations. The explanation of this fall has already been given.

Once again the number of intermediates examined is higher than that of either entrants or leavers and again the number of leavers is the lowest of the three. While a consideration of the trend of the birth-rate in recent years makes it clear that the number of entrants will be below that of intermediates, it is not at all obvious why the number of leavers should be the lowest of all. A possible explanation may be found in the transfer to secondary schools of some of the children at the higher ages.

The numbers are:—Entrants 927, intermediates 986, and leavers 903.

*Findings of Medical Inspection.*—The defects disclosed are set out in the Board's Tables IIA. and IIB. appended to this report. The following items call for special comment.

*Malnutrition.*—As was the case last year, the figures relating to the nutritional state of the children are set out in a separate table. These figures deal with those children subjected to complete routine inspection and, in addition, the results of the general nutritional survey referred to in a previous paragraph are also available for comment.

The figures set out in Table IIB. may now be compared with the corresponding figures for 1935, the first year in which they were available in this form. In 1935, 267 children were classed as of excellent nutrition, or 9.44 per cent. of those examined, while, in 1936, 528 children attained this standard, or 18.644 per cent. Corresponding figures for "normal" nutrition in 1935 were 2,314 or 81.83 per cent. and in 1936 are 1,938, or 68.432 per cent. Adding the two figures together for each year, it appears that in 1935 there were 2,581 children, or 91.27 per cent. of those examined, who could be classed as of normal or "super-normal" nutrition, while in 1936 the total had fallen to 2,466, or 87.076 per cent. of those examined.

This means that in 1936 there was some increase of undernourished children. The figures are, for 1935, 239 slightly subnormal children, or 8.45 per cent., and 8 children whose nutritional state was labelled as definitely bad, or 0.28 per cent., while, in 1936, 361 slightly subnormal children were found, or 12.747 per cent., and 5 children of definitely bad nutrition, or 0.177 per cent. The total of undernourished children for 1935 was 247, or 8.73 per cent., while for 1936 it was 366, or 12.924 per cent.

This rise of about 4 per cent. in the number of undernourished children, following on a rise in the previous year, at first sight appears rather disquieting, but further examination of the position reveals that it is really more satisfactory than it seems. The whole of the rise has taken place in the class labelled "slightly subnormal" and, as was explained in the report for 1935, the criteria

for placing a child on one or other side of the borderline between normal and slightly subnormal are so vague that a variation of this magnitude in any one year is of doubtful significance.

On the other hand, there has been a rise of approximately 100 per cent. in the number of children placed in Class A, excellent nutrition, and a fall in the number of children placed in Class D, bad nutrition, though the numbers dealt with in this latter class are in themselves so small as to make it doubtful whether the fall can be regarded as statistically significant.

A full nutritional survey was carried out during the year in 89 schools and it is proposed to complete the work in the remaining schools during 1937.

In 8 of the schools, no under nourished children were found at all, namely Arrington, Rampton, Harlton, Kingston, Coton, Toft, Pampisford, and Soham Fen. It is interesting to note that of these Rampton is, and has always been, without a supply of milk, and that Soham Fen was until recently without a supply. Many of these schools, including Rampton, are quite small, and it may be that the absence of under-nutrition is a purely chance affair owing to the small number of children available for investigation, but this explanation will not serve for all of them.

The total number of children examined was 6,156, of which 470 showed some degree of undernourishment or 7.6 per cent. It will be noted that this is very much below the percentage discovered at routine inspection, a somewhat surprising result since it might well have been expected that greater attention to nutrition would have revealed more undernourished children. Of the number 470, only 5 children were placed in category D, bad nutrition, the remainder being placed in category C, slightly subnormal. The number 5 represents a percentage of .08, again a very much smaller number than that found by routine inspection. These five children were found in Hauxton, Horseheath, Duxford and Linton Schools, the last having two such children. They bear no relation to the total amount of malnutrition found, for at Hauxton as many as 28 per cent. of undernourished children were found, while at Duxford only 7.5 per cent. were discovered, the intermediate numbers being Linton 11.1 per cent. and Horseheath 13.3 per cent.

Throughout the 89 schools examined there was a wide variation in the percentage of malnutrition found, but it is not proposed to give a complete list.

The highest percentages of malnutrition were at Hauxton (28 per cent.), Horningsea (25 per cent.), Odsey (23.9 per cent.), Steeple Morden (20.6 per cent.), Fowlmere (18.7 per cent.), Lolworth (18.2 per cent.), Boxworth (18.1 per cent.), Croydon (15 per cent.) and East Hatley (15 per cent.).

The lowest percentages, apart from those schools already mentioned which had no malnourished children, were at Soham Junior Girls' (1.2 per cent.), Longstanton (2 per cent.), Weston



Colville (3 per cent.), Whittlesford (3.7 per cent.), Great Abington (3.7 per cent.), Grantchester (3.7 per cent.) Barton (4 per cent.), Milton (4 per cent.), Swavesey (4.1 per cent.), Girton (4.2 per cent.), Longstowe (4.2 per cent.), Newton (4.3 per cent.), Soham Infants (4.3 per cent.), Burrough Green (4.4 per cent.), Madingley (4.4 per cent.), Harston (4.5 per cent.), Sawston Senior (4.5 per cent.), Burwell Senior (4.8 per cent.).

With the exception of Swavesey, Sawston Senior, Burwell Senior and Harston, however, all the schools in the two lists have a number in attendance of less than 100 and it is doubtful to what extent schools with so low a number of children serve as a fair basis of comparison. Obviously one or two more malnourished children at such schools would be sufficient to make a considerable difference to the percentage. It may be of interest to compare the figures for all the schools examined at which more than 100 children were in attendance. The following is the list:—

Swavesey (4.1 per cent.), Soham Infants (4.3 per cent.), Harston (4.5 per cent.), Sawston Senior (4.5 per cent.), Burwell Senior (4.8 per cent.), Histon (5.2 per cent.), Gamlingay (5.6 per cent.), Melbourn (6.4 per cent.), Burwell Junior Parochial (7.3 per cent.), Cottenham (8.1 per cent.), Sawston Junior (8.7 per cent.), Bassingbourn (9.2 per cent.), Great Shelford (10.3 per cent.), Soham Boys' (10.7 per cent.), Linton Mixed (11.1 per cent.).

It will be seen that the variation in numbers in this list is within considerably narrower limits, but even so, some of the results are a little curious. It is difficult to see, for instance, why Linton should have almost twice the percentage of undernourishment than that at Gamlingay, and why Cottenham should have approximately twice that at Swavesey. Great Shelford has a comparatively high percentage, but it will be seen that, taking the lists as a whole, the great majority of the schools in close proximity to the Borough of Cambridge have low percentages. It is perhaps noteworthy that Linton, the school with the highest percentage in the last list, is the only one at which more than one child was placed in category D.

*Uncleanliness.*—There were 72 (routine 65, special 7) children found by the Assistant School Medical Officer to have nitty or verminous heads, as compared with 68 in the previous year. Of the 72, 37 required immediate remedy, as compared with 22 in 1935, and 35 were noted for observation only. The percentages of unclean children based on routine examination only have been:—

	1932.	1933.	1934.	1935.	1936.
Total found unclean (all degrees) ...	2.3	2.3	1.9	2.1	2.5
Requiring treatment ...	0.9	1.1	1.4	0.8	1.3

Thus the percentage found unclean was the highest for some years and, of these, the proportion requiring immediate remedy was well above the yearly average for the past five years. Attention was drawn in the report for 1935 to the preventable nature of this condition and once again emphasis must be laid on the regret which



all must feel, not only because such a state of affairs still exists in our schools, but even more because it shows little sign of diminishing. One can only hope that the scheme of regular inspection by the nurses which is to be put into force after April 1st, 1937, will have a beneficial effect on this matter.

The 41 children noted at routine inspection to have uncleanly bodies were in the proportion of 1.5 per cent., compared with 4.0 per cent. in 1935, but there were no cases of actual body lice. It must be admitted that country dwellers have difficulties with regard to cleanliness which are not experienced by those who live in towns, but it may be hoped that the improvement in rural water supplies may help them to overcome these difficulties in some measure, and that no undue obstacle may be placed in the way of this improvement.

*Visual Defects.*—The figures for refractive errors, including cases of squint, for the past five years are as follows:—

			1932.	1933.	1934.	1935.	1936.
<i>Referred for treatment:</i>							
Routine	...	...	67	64	84	70	102
Specially	presented		19	20	27	15	18
<i>For Observation:</i>							
Routine	...	...	176	184	165	138	225
Specially	presented		12	23	36	11	32

The all round increase in these figures seems enormous. It is true that they follow an exceptionally low year, but, when they are compared with the figures for previous years, the conclusion that there has been some variation in the standard of examination seems inescapable. There has also been some increase in the number of cases of external eye disease found, but these cases consisted of blepharitis and conjunctivitis only and call for no comment. There has again been no outbreak of conjunctivitis in any school.

*Nose and Throat Defects.*—The total number of cases of chronic tonsillitis discovered (routine and special), with or without accompanying adenoids, was 221 as against 141 in the previous year. Based on routine inspection only the percentages for this and previous years are as follows—1934, 3.4 per cent.; 1935, 4.6 per cent.; and 1936, 7.7 per cent. Here again, the magnitude of the rise suggests some variation in standards. There were 8 cases of adenoids only as compared with one in the previous year, but only 2 of these were thought to require treatment, the remainder needing observation only. There were 10 other cases of adenoids associated with chronic tonsillitis, as against eleven in the previous year, of which 6 were thought to require treatment. The increase in the total number of "other conditions" of the nose and throat has been enormous, a total of 416 being recorded (routine and special, treatment and observation) as against 91 in the previous year.

*Dental Defects.*—These are dealt with in the reports of the School Dentists, which are appended, and in Table V.

*Orthopaedic and Postural Defects.*—A total of 119 cases of deformity was discovered, as against 42 in the previous year. Of these 48 were cases of rickets (20 in 1935). There were 9 cases of spinal curvature, whereas none were discovered in 1935, and this makes it probable that the view expressed in the report for that year to the effect that minor cases had not been recorded was the correct one. Of this large number of cases of deformity, only 29 were thought to require treatment, the remainder requiring no more than observation, but this figure of 29 is over three times as high as the corresponding figure for the previous year. No cases of tuberculosis of the bones and joints were discovered at routine inspection, but two such cases in children of school age were sent to orthopaedic hospitals by the Tuberculosis Officer during 1936.

*Heart Disease and Rheumatism.*—Four cases of organic heart disease were found, the number in the previous year being two, but these figures are too small to be of statistical significance. All required observation only. Twenty-eight cases of functional heart disease were recorded, but their significance is wholly problematical and it seems doubtful whether they should be regarded as cases of heart disease at all.

*Tuberculosis.*—Again no cases of the pulmonary type of the disease were discovered at school medical inspection, but it will be remembered that the reason for this was discussed in the report for 1935, and it is not necessarily an indication of the amount of pulmonary tuberculosis actually existing in school children, although there is no doubt that the clinically recognisable cases are extremely few in number. Four cases of other forms of tuberculosis were found (six in 1935) and two of these were glandular (four in 1935). At the end of the year, two children were at certified special schools suffering from the pulmonary form of the disease and two suffering from the non-pulmonary form. One case of arrested pulmonary disease and thirty-four of non-pulmonary disease were at ordinary elementary schools and one case of non-pulmonary disease was not at any school.

*Diseases of the Skin.*—The following figures show the incidence of the principal contagious skin diseases:—

	Discovered at Routine Inspections.	Notified by Teachers or Nurses.	Total.
Ringworm of the scalp	5	14	19
Ringworm of the body	5	8	13
Scabies ... ..	5	1	6
Impetigo ... ..	6	102	108

The number of cases of ringworm of the scalp is considerably higher than the number in the previous year, but the number of instances of body ringworm is somewhat less. It must be pointed out, however, that of those found at routine inspection, some were noted for observation only. These were old cases in which it was not quite certain that the condition had been completely eradicated. The same remark applies to the cases of scabies. The number of cases of impetigo is five more than that of the previous year, but this increase is insignificant and it may be said that the improvement noted in 1935 has been maintained. Nevertheless it must again be emphasised that the number is larger than it need be and that such cases are productive of much avoidable absence from school.

*Following-up.*—There has been no change in the arrangements during 1936. As has been said previously, however, the medical re-inspection of some schools has suffered because of the nutritional survey. The following figures relate to the work of the School Nurses.

1. <i>Visits to Schools</i> :—			
(a)	Routine Medical Inspection ...	...	204
(b)	Special verminous inspections	...	37
(c)	Other purposes	... ..	1258
			<hr/>
			1499
			<hr/>
2. <i>Visits to Homes of Scholars</i> :—			
(a)	Following up to secure treatment	...	6411
(b)	Special enquiries into infectious and contagious diseases	... ..	1305
(c)	Special enquiries into refusals of dental treatment	... ..	2448
(d)	Other purposes	... ..	653
			<hr/>
			10817
			<hr/>

It is worth noting that there has been an increase in every single category and that the total number of visits is greater than that of the previous year by 1567.

### Arrangements for Treatment.

There has been no change in the general arrangements for treatment during 1936. The following are points in connection with the treatment of special defects.

*Malnutrition.*—The scheme for the provision of milk in schools at a cheap rate has continued unaltered during the year. The number of schools in which the scheme was in operation increased from 110 at the end of 1935 to 121 at the end of 1936, and the



number of children receiving milk also increased during the same period from 4,239 to 4,764. The increase was particularly remarkable, however, in the case of children receiving free milk, where it was from 135 to 330, and it may fairly be claimed that no undernourished child whose circumstances prevent a supply at the parents' own cost is deprived of this advantage when there is a milk scheme available. It may also be stated that the term undernourishment is interpreted in the widest possible way, and that milk is granted in every case where it seems that the child is failing to gain full benefit from the education provided by reason of a defect which milk will improve.

It is nevertheless, doubtful if even this goes far enough, as it seems foolish in cases where financial conditions make it clear that there must be some degree of under-feeding to wait until a condition of ill-health supervenes before dealing with it. It would obviously be more economical in the long run to supply milk at the outset. Indeed there is much to be said for the institution of a free supply of milk to every child attending a public elementary school, but such a course has its dangers in that it might lead to a demand for a general supply of other forms of nourishment besides milk, and also because it tends further to diminish an already fading sense of parental responsibility which is becoming somewhat widespread as a result of public measures for the welfare of children. No doubt the second factor is difficult to avoid altogether, but it is a point which requires very careful watching in the administration of such measures.

A further difficulty arises in the case of children who have been receiving free milk, and whose nutritional state has so far improved that they can no longer be said to be failing to derive benefit from the education provided by reason of a lack of it. Obviously, if this is to be the criterion, such children cannot continue to receive milk at the cost of the Education Committee for an indefinite period, and yet it is likely that in some cases the benefit which has been gained may be lost again as a result of discontinuance of the supply. Each case is treated as sympathetically as possible and wherever it seems possible that such a result will follow, the supply is continued. The Education Committee has recently decided that no free supply should be discontinued in the middle of a term, but that it should go on until the end of any term in which it is first thought to have become unnecessary. Not only does this reduce the likelihood of a premature cessation of supply, but it also obviates the difficult position which often arises when a child who has been receiving milk arrives at school one day and is suddenly told that he may no longer have it.

Although the total number of schools at which a supply exists has increased during the year, there have been many difficulties encountered in the securing of a continuous supply in every case, as a result of which not all of the number have had a supply throughout the year, and some which had a supply at the beginning of the year have been without one at the end. The greatest difficulty

has been the argument of some producers that the terms offered by the Milk Marketing Board are not sufficiently remunerative for the amount of trouble which a supply to schools is said to entail. It is hardly the business of the School Medical Officer to discuss the merits of this question, but it may be mentioned that the difficulty has been met in some cases by allowing the supply to be made in bulk instead of in bottles. The condition is made that the bulk supply destined for the school must pass direct from dairy to school and that the container must not be opened for deliveries to other customers en route. It is felt that if this condition is observed, little, if anything, is lost from the hygienic point of view, but the difficulties of distribution of a bulk supply to individual children in a large school are considerable, and it has not been possible to make this concession widespread.

The following figures show the types of milk supplied in the schools of the County:—

Grade A, (Tuberculin Tested)	...	...	4
Pasteurised	...	...	9
Accredited	...	...	58
Ordinary	...	...	50

The proportion of ungraded milk remains about the same, but as in previous years, special enquiry is made into the methods of ungraded producers wishing to supply schools and samples are taken from their supplies from time to time. In general the results are satisfactory, but, however much one may regret it, it remains true that pasteurised milk must still be regarded as the best for consumption by children, next at all events to tuberculin tested milk. It will be seen that four schools were receiving tuberculin tested milk at the end of the year, but one producer supplying three schools has unfortunately found it necessary to discontinue the supply and can hold out no prospect that he will re-commence.

Every effort is made to encourage the consumption of milk and to this end not only have posters and leaflets provided by the National Milk Publicity Council been distributed in the schools, but "milk days" have also been held in some schools at which demonstrators from the National Milk Publicity Council have discussed and displayed the advantages of milk consumption. All parents are invited to attend and are given afternoon tea. The preparation of various milk dishes is demonstrated and a film on milk production is shown. The villages treated in this way during 1936 were Burwell, Cottenham, Histon, Sawston and Soham and the attendances were very gratifying.

The arrangements for the supply of free mid-day meals to undernourished children at those schools where they are available have continued during the year, but unfortunately their application is limited by the very small number of schools in which they exist. Free meals were being supplied to 38 children at the end of the year.

Cod liver oil and malt has continued to fill a need which is not met by milk in every case and has been supplied free or at a small weekly charge in suitable cases throughout the year.

Ill-nourished children admitted to residential open air schools during 1936 numbered 6, making, with three in residence at the beginning of the year a total of 171 who have been maintained in such institutions since the arrangements started.

*Uncleanliness.*—As was the case in previous years, there were no routine inspections of schools by School Nurses for the discovery of verminous children. The Education Committee has, however, decided that the time has arrived when arrangements for such inspections should be instituted and have asked the District Nursing Associations to allow their nurses to undertake this work as from April 1st, 1937. In consideration of their doing so, an extra grant of £50 is being paid to the County Nursing Association for distribution to the District Associations. As was pointed out in the report for 1935, it is not to be expected that such an arrangement will lead to an immediate decrease in the number of unclean cases found, but an apparent increase is likely at first owing to the intensified vigilance which it is hoped will result.

During 1936, the supervision of cases of uncleanliness discovered at routine inspection continued and special visits were made to schools by School Nurses when circumstances arose which made them necessary.

Thirty-seven such visits were made and a total of 1,376 children were examined, 100 showing some degree of uncleanliness. The proportion of unclean children found is very much less than that found in 1935. In fact, the actual number is less by 27 in spite of there having been nearly 400 more children examined. Nevertheless, exclusion proved necessary for 74 children as compared with 57 in 1935 and 22 in 1934. In one case, prosecution was necessary and the parents were fined the sum of £1. This prosecution was taken under the bye-laws relating to school attendance.

The School Nurses give valuable advice and help in the cleansing of verminous children, but, as is usual in rural areas, there are no cleansing stations which can be used for the work in difficult cases.

*Minor Ailments and Diseases of the Skin.*—There is nothing of note to report under this head.

*Visual Defects.*—A total of 203 children were dealt with during 1936 (222 in 1935) of whom 177 received attention under the Committee's scheme (176 in 1935) and 23 through private practitioners or otherwise unofficially. Of those who came under the Committee's scheme, 105 (including two children of under school age) were dealt with by the Assistant School Medical Officer as against 72 in 1935 and 72 by Dr. Graham at Cambridge (104 in 1935). It will be seen therefore that the numbers dealt with by



the two methods have been practically reversed, and this is due to the fact that it was necessary in 1935 to refer many more cases to Dr. Graham owing to the sudden death of the Assistant School Medical Officer and the difficulty of finding an immediate successor prepared to carry out refractions. Spectacles were prescribed for and received by 187 children, of whom 161 received them with the aid of the Committee. The total number of children examined for the purpose of prescribing glasses shows a drop as compared with the figures for 1935, but it will be noted that the whole of this drop is in relation to children treated privately and that the number dealt with through the school medical service remains practically unchanged.

It has been found that the method of refraction used up to the middle of 1935 was not entirely satisfactory in two respects. In the first place, the visiting of small schools for the examination of one or two children was not economical of time, and, in the second place, the carrying out of refractions by means of a combined lamp and retinoscope worked by a small dry battery did not give the best results. For this reason much larger numbers of the children treated by the Assistant School Medical Officer have been brought into Cambridge for the purpose, travelling expenses being paid in appropriate cases. It is hoped that a good deal of this travelling will be obviated when the erection of village colleges with rooms suitable for eye work has been completed, and in the meantime it is being arranged that the larger schools shall be visited where there is a room having electric light which can be used for the carrying out of refraction and testing.

*Nose and Throat Defects.*—The total number of children treated for these defects was 38. Of these, 30 received operative treatment, 11 aided by the Local Authority and 19 making their own arrangements. The number receiving operative treatment is 22 less than the number in 1935 and the fall affects chiefly the number aided by the Local Authority. This is an exact reversal of the position noted in 1935, when there had been an increase both in the total number and in the number aided by the Committee. The number receiving other forms of treatment was 8 as against 7 in the previous year, but it may be pointed out again that the figures relating to these forms of treatment are difficult to obtain with any degree of accuracy.

*Dental Treatment.*—During 1936, important developments in the dental work in the schools of the County have taken place. The second dental surgeon, mentioned in the report for 1935, commenced duties on February 1st and the two dental attendants also began work at different times. The result is that during the year under discussion it has been reasonably possible for the first time to give adequate treatment to all children desiring it in both elementary and secondary schools of the area. The appointment of the second dental surgeon has, of course, been the prime factor in this achievement, but the work of the dental attendants must not be underrated, as they have

undoubtedly been of great assistance and have relieved the dentists of much routine work, besides helping in the control of the children.

The Education Committee also decided, when considering estimates for the financial year 1937-38, to make provision for the travelling dental clinic which is thought to be necessary, and it was hoped that during 1937 this proposal might have come to fruition. Unfortunately, however, the County Council felt that, at a time when expenditure was rising in so many directions, this item should not be approved and the matter has had to be postponed for at least another year. It is to be hoped that this decision will not result in anything more than a postponement, as it is hopeless to expect the dentists to produce really good work under the conditions obtaining at some of the rural schools.

In 1936, clinic sessions have been held at the Shire Hall for the treatment of both elementary and secondary school children, largely on Saturday mornings. These have been found to be of great advantage in that a good deal of treatment requiring more than one visit can be accomplished and properly supervised, and also that a certain amount of treatment of an emergency nature found to be necessary between the routine visits of the dentists to the schools can be done. In addition, in the case of secondary school children, much of the treatment can be carried out in the school holidays, thus saving loss of time and inconvenience to the teaching staff during the term.

In the course of the year, the two dental surgeons have inspected 7739 children attending elementary schools and 3288 have received treatment.

The number of children inspected was 701 less than in the previous year, but on the other hand the number of children treated was 879 more, while the number inspected in secondary schools was an increase of 629, with a corresponding increase in the numbers treated.

The percentage of elementary school children requiring treatment was 66.7, a considerable rise over the figure for the previous year, which was itself higher than the figures for 1933 and 1934. To what extent this figure represents an actual rise in the amount of dental disease, and to what extent it reflects the greater care which it has been possible to give to the examination of each child because of the increase in staff, is problematical, but it seems probable that the latter suggestion is the more correct one.

The percentage of children receiving treatment of those found to require it was 63.7 as against 62.9 in the previous year. This slight rise is gratifying for what it is worth, but even this figure is slightly less than that for 1934 and it is doubtful whether much significance can be attached to it. It rather seems as though the number accepting treatment had attained a more or less constant level. The absence of appreciation of this valuable public service in the minds of many people is amazing, and the excuses advanced

to the nurses on their " follow-up " visits for failure to take advantage of it are of the most childish and unconvincing description. There can be no doubt, as was said in the report for 1935, that the wishes of the children play far too prominent a part. This factor is even admitted by many parents, and its existence is only too evident in many of the cases where it is not admitted.

The refusal rate is surprisingly similar in the case of each dentist, 36.5 per cent. in one case and 35.8 per cent. in the other.

The School Nurses visited each family in which a refusal occurred with few exceptions and 2,448 such visits were made.

The total number of fillings was 3,009 as against 2,069 in the previous year, an increase of very nearly 1,000, apart from the increase in the amount of work done in secondary schools. Thus, not only was there a considerable increase in the number of children treated, but the increase took place in a desirable direction, namely, in the direction of conservation of teeth. Nevertheless, the number of extractions was about one and a half times that of the previous year, showing that one form of treatment did not gain at the expense of another.

As in previous years, a lecturer sent by the Dental Board of the United Kingdom visited some of the schools of the area and in 1936 a fortnight's campaign was undertaken. 30 schools were visited and attention was concentrated as far as possible on those schools where the response to the facilities offered for treatment has been inadequate in the past. The value of this work is obvious, but it is to be regretted that it cannot be intensified and that its approach is to the children only, for it is evident that the parents stand in greater need of its educational influence than do the children themselves.

*Orthopædic Treatment.*—The Education Committee continued to pay a grant to the Cambridgeshire Branch of the British Red Cross Society in respect of the maintenance of orthopædic clinics and the carrying out of orthopædic treatment among children of school age. There has been no change in the number or situation of the clinics during the year, that most generally used by Cambridgeshire children being at Addenbrooke's Hospital.

The following figures relate to the work of the clinics amongst the people of the rural part of Cambridgeshire, that is the area covered by the County School Medical Service:—

Age.		New Cases.	Old Cases.	Clinic Visits.	Home Visits.
Under 5	...	25	80	362	44
School age	...	29	152	409	29
Adults	...	45	98	238	19
Total		99	330	1009	92



It was not possible to publish figures comparable to the above in the report for 1935 for the reasons stated there. On comparing them with the figures for 1934, it is evident that there has been an increase in every single group except in that relating to home visits. It may be deduced that parents are paying more attention to minor defects in their children and are more readily applying to orthopædic clinics for advice with regard to them. The falling off in the number of home visits may be taken as some corroboration of this. No doubt it reflects the greater accessibility of clinics as transport facilities improve, but it seems fair to assume that a diminished severity in the conditions treated is a factor. The proportion of adult new cases is considerably higher than in 1934 and seems to throw some doubt on the deduction which was made from the figures for that year that a very large proportion of orthopædic defects are discovered and treated in early life. Actually, however, there is no ground for doubt, as the increased proportion of adult cases is probably related to the fact that it is becoming the practice to classify as orthopædic cases many conditions which would at one time have been regarded as general surgical cases, notably fractures of various kinds. Every effort is made to discover orthopædic cases at the earliest possible age and to persuade the parents to accept treatment in order to prevent the severe degrees of crippling which may result from neglect. This is largely achieved through the work of the District Nurses in their capacity of Health Visitors among children of under school age and there is no reason to think that this work is failing in its purpose.

Besides the grant made direct to the British Red Cross Society, the Education Committee has assisted various individual cases in the purchase and repair of splints and appliances during the year. This form of help was granted on 7 occasions, one child being assisted on two separate occasions, so that the number of individual children concerned was 6.

The crippled child who was being maintained at the Heritage Craft Schools, Chailey, Sussex, was discharged as having received maximum benefit, but another crippled child was admitted to the Manfield Orthopædic Hospital and remained there at the end of the year. Four children of school age were given treatment at appropriate institutions for tuberculosis of bones and joints under the Public Health Committee's scheme for the treatment of tuberculosis, three being new admissions. None remained in institutions at the end of the year.

*Tuberculosis.*—The following are the figures relating to the treatment of this disease in children of school age for the year 1936.

<i>Admitted during 1936:</i>				<i>Boys.</i>	<i>Girls.</i>	<i>Total.</i>
Lungs and Thoracic Glands				—	1	1
Cervical Glands	...	...		1	—	1
Knee Joint	...	...	...	2	—	2
Spine	...	...	...	—	1	1
Abdomen	...	...	...	1	—	1
Total ...				4	2	6

*Remaining on January 1st 1937:*

	<i>Boys.</i>	<i>Girls.</i>	<i>Total.</i>
Lungs ... ..	—	2	2
Cervical Glands ... ..	—	1	1
Abdomen ... ..	1	—	1
Total ...	1	3	4

There is no substantial difference between these figures and those of the previous year. The number of admissions was the same, but the number remaining in institutions at the end of the year was three less.

*Other Defects Treated.*—Of 63 letters of introduction given to Addenbrooke's Hospital, 17 were for tonsils and adenoids, 4 for nasal catarrh or obstruction, 1 for ringworm of the scalp, 5 for ear disease, 2 for external eye disease, 4 for defective vision, 1 for dental treatment, 13 for orthopædic conditions and 16 for other conditions.

*Neglect.*—During the year 19 children in 11 families were referred to the N.S.P.C.C., in 5 cases for general uncleanliness and neglect, in 1 for neglect with some degree of cruelty, in 1 for a verminous condition, in 1 for neglect with undernourishment, in 1 on account of bad home conditions, in 1 for failure to attend an orthopædic clinic and in 1 for failure to obtain treatment for defective vision.

The Education Committee made the usual subscription to the Society's funds.

## Infectious Diseases.

The following table shows the number of schools from which notifications of infectious disease were received from Head Teachers during the year:—

Diphtheria ... ..	1
Scarlet Fever ... ..	20
Measles ... ..	52
German Measles ... ..	40
Whooping Cough ... ..	31
Chicken Pox ... ..	29
Mumps ... ..	15

The School Medical Officer furnished 98 certificates for purposes of calculation of attendance where the Head Teacher had notified its reduction below 60 per cent. for a week, owing to infection, the special grounds being first verified in every case. Special visits were paid to schools by the School Medical Staff on two occasions, once in connection with scarlet fever and once with an outbreak of impetigo. One visit was also paid to the home of a school child in connection with suspected scarlet fever reported by a Head Teacher, the diagnosis being thereby discovered to be unfounded. No schools were closed on account of infectious disease during the year either at the instance of the School Medical Officer or the local sanitary authority.

The prevalence of scarlet fever was somewhat less in 1936 than in the previous year and once again the notified cases had the curious characteristic of quite sporadic occurrence. Nothing which could be described as an epidemic occurred, the cases being widely scattered throughout the County. There was, as usual, some reason to believe that a number of mild and undiscovered cases existed as well as those actually diagnosed.

The almost complete absence of diphtheria continues. While this is gratifying for the present, it makes it probable that any epidemic which does arrive will be the more devastating in its effects. So far it has not been possible to arrange for any scheme of artificial immunisation, the importance of which in non-epidemic times has been urged on several previous occasions. A report was presented to the County Public Health Committee during the year suggesting certain possibilities and this was ordered to be forwarded to the local sanitary authorities, but, so far as is known, no action has resulted.

Perhaps the most noteworthy feature during the year was the extensive outbreak of German Measles which affected both the Borough of Cambridge and the rural area. Large numbers of cases occurred resulting in widespread absence from school, but, as usual, there were no complications or after effects. This disease and chicken pox are of quite minor importance in themselves and were it not for the possibility of confusion with measles and small pox respectively, would probably attract much less attention than they already do. As it is, it seems doubtful whether the period of absence from school prescribed could not be cut down in both cases without any serious harm resulting. In the case of chicken pox, of course, the rash remains for a considerable period and is rather disfiguring so that the education of public opinion to allow of school attendance while it exists would probably be a difficult matter. It is certain that a considerable proportion of the rather large number of cases of measles were in fact cases of German measles.

### **Provision of Meals.**

Once again it is not possible to record an increase during the year in the number of schools where a hot mid-day meal is obtainable by the children who have to remain at school all day, but the accession of the new Village College at Bottisham to the number since the end of the year is to be noted with satisfaction. There can be no doubt of the great value of such an arrangement.

The following notes furnished by Head Teachers give some account of the work in the five schools in which it has been carried on during the year under discussion.

*Bassingbourn Council School.*—" From September 21st, 1936, to March 5th, 1937, 4,309 dinners were served to a maximum of 58 and an average of 38 children. The charge is 3d. per dinner. Infants paying 2d. and Standard I. 2½d. Reductions are also made where there are several in one family. Of the three families who stayed



at mid-day, but did not partake of the hot dinner last year, five children have been provided with free dinners by the County Council, leaving only two children who bring their own."

*Burwell Senior Council School.*—"Our arrangements this year have been almost identical with those of last year. The numbers taking hot meals were rather less this year than in the previous year. The decline is due to the smaller number of children who remain at school during the mid-day recess and the percentage of such children who take the meal has remained much the same. About 30 children participated during the first term and 22 during the second. The charge, 2½d., has remained the same."

*Isleham C. of E. School.*—"Kindly gifts of vegetables and fruit brought from parents and friends have made a two course hot meal possible for 2d. per head and for a profit to be shown. The Cookery Class in turn arrange a varied menu, purchase, cook and pay for an average of 25 children a day. They also show a balance sheet at the end of each week."

*Sawston Senior School.*—"The dinner scheme in this school continues very much as in previous years. The highest number reached last term was 160 and during several weeks the average was over 150. Very few children who begin to take advantage of the scheme ever cease taking it, though many of them have very decided preference and dislikes with regard to the food provided. Salads in the summer and soup in the winter are becoming more popular: at one time a considerable number of children refused to look at either of these. The present Domestic Science Teacher has given very careful thought to the preparation and arrangement of the meal."

*Fordham C. of E. School.*—"The mid-day meal during the past winter appealed to an increasing number of children, an average of forty now being catered for. The charge has been 1/- per week for an only child in a family, and 10d. for each child when more than one in the family. The cooking of the meal has been done by the senior girls, one of whom is also responsible for the keeping of accounts, and a member of the staff supervises. A woman has now been engaged by the Committee to do the washing up."

As has been said earlier in the report 38 children were receiving mid-day meals at the cost of the Education Committee at the end of the year.

### **Co-operation.**

As in previous years, great assistance in the work of the School Medical Service has been given by the many voluntary bodies, both local and national, at work in the area. Special reference and grateful acknowledgement should be made to the County Nursing Association and District Nursing Associations, the County Branch of the British Red Cross Society, the Cambridge and District Central Aid Society, Addenbrooke's

Hospital, the National Society for the Prevention of Cruelty to Children, Dr. Barnardo's Homes, the Invalid Children's Aid Society and the Ogilvie Trust. To all of these bodies some degree of remuneration has been paid by the Education Committee either in the form of annual grant or of payment per case, but it has never been suggested by the bodies concerned that their assistance is conditional upon the actual amount received.

Once again the unfailing help of the Head Teachers and their great interest in the children has been one of the mainstays of the work. Not the least important side of the work of the school medical service is that connected with the care of individual children between the routine inspections, and without the ready co-operation of the teaching staff the possibilities in this direction would be extremely limited. The time and energy which attention to these cases requires must be considerable and full acknowledgement is made of the assistance received.

The Education Department and Public Health Department interchange information freely and all departments of the County Council give assistance wherever possible.

It will not be out of place in this connection to record the full measure of co-operation which exists between the school medical department and the local sanitary authorities in connection with the control of infectious disease and to express thanks to Dr. A. Morgan, the Medical Officer of Health, for the help which he is always ready to give.

### Blind, Deaf, Defective and Epileptic Children.

Details regarding exceptional children in the area will be found in Table III. at the end of this report. During the year, 6 children were sent to open-air schools and one to a special school for the mentally defective.

The year's record of children maintained in institutions is as follows:—

		<i>Mentally</i>			<i>Physically</i>
		<i>Defective.</i>	<i>Epileptic.</i>	<i>Deaf.</i>	<i>Blind. Defective.</i>
Remaining Dec. 31st,					
1935	...	5	—	5	3
Admitted in 1936...	1	—	1	—	7
Discharged in 1936	2	—	1	1	10
Remaining Dec. 31st,					
1936	...	4	—	5	2
					1

All the children in the Physically Defective column except one were in open-air schools. The exception was a crippled child who remained in the institution at the end of the year.

*Mental Deficiency.*—Twelve cases of mental deficiency were brought to the notice of the Education Committee during the year. Of these six were for purpose of ascertainment and record only; two were notified to the Mental Deficiency Committee as ineducable in a special school or class, one being a “special circumstance” feeble-minded child in whose case the consent of the Board of Education to notification was obtained; two were notified to the Mental Deficiency Committee as being in need of further care on leaving a special school at the age of 16 and two were recommended for admission to special schools. One of the cases notified to the Mental Deficiency Committee as ineducable was placed under Statutory Supervision and the other, the “special circumstance” case, was admitted to the Royal Eastern Counties Institution under Order.

One of the two children recommended for admission to special schools went to the Royal Eastern Counties Institution, Colechester, but in the other case parental consent was not forthcoming, and it was not felt that the circumstances were sufficiently strong to warrant application to the Courts.

The two cases notified as being in need of further care on leaving special schools remained at the Royal Eastern Counties Institution, Orders being made under the Mental Deficiency Acts.

As in previous years, many mentally defective children have had to remain in elementary schools because of the difficulty that in a county area all special school accommodation has to be residential in type. Not only does this entail great expense, but it engenders opposition on the part of many parents to special education. The consequences of this lack of special school accommodation are more far reaching than is generally realised. Besides depriving mentally defective children of the education appropriate to their needs and acting to the detriment of normal children who have to be educated with them in elementary schools, it prevents the formal notification of children who may be in need of further care and attention on leaving school to the Mental Deficiency Committee. As a result, it may be difficult to deal with them under the Mental Deficiency Acts in future years, although such action may be obviously appropriate to the case.

## Medical Inspection in Secondary and Technical Schools.

All candidates to whom County Minor Scholarships and Free Studentships at the Technical School had been awarded were examined, the numbers being as follows:—

						<i>Boys.</i>	<i>Girls.</i>
Cambridge and County High School for							
Boys	...	...	...	...	...	35	—
Cambridge and County High School for							
Girls	...	...	...	...	...	—	37
Soham Grammar School	...	...	...	...	...	9	—
Ely High School	...	...	...	...	...	—	1
Perse Schools	...	...	...	...	...	15	3
Cambridgeshire Technical School	...	...	...	...	...	20	20
						79	61



All candidates were considered fit on health grounds to hold their scholarships.

Of 17 candidates with defective sight, 10 were already wearing suitable spectacles and 7 have since had spectacles provided, 4 privately and 3 through the School Medical Service.

Dental treatment was found to be required by 15 candidates. For 8 it was provided by the County School Dentists and for 7 privately.

Apart from those whose defects had been treated, periodic re-inspection was thought to be required by 15 pupils on account of defective sight, 6 for nose, throat and ear defects, 20 for flat feet, 3 for postural defects and 11 for general conditions.

In addition to the examination of scholarship candidates, a complete routine medical inspection was carried out at all the secondary schools in the area during the year on the same lines as in the previous year. The only difference was that, in the case of the "leaver" class, it was not thought necessary to examine again any pupil who had been examined in that class in the previous year, unless he or she was known to be leaving school at or before the end of the academic year. As 1935 was the first year in which leavers had been examined, every pupil who had attained the age of 16 or would attain it during the year was treated as a leaver in that year. In order to economise the time both of the school and of the medical service, the majority of the entrants to the County Boys' School were examined at the Shire Hall during the summer holidays preceding their entry, in the same way as the scholarship candidates for all schools are examined.

The total number inspected in the Secondary Schools was as follows:—

			<i>Male.</i>	<i>Female.</i>
County High School for Boys ...	...	...	244	—
County High School for Girls ...	...	...	—	187
Soham Grammar School ...	...	...	74	—
Technical School ...	...	...	78	67
			<hr/> 396	<hr/> 254

Excluding scholarship entrants, the principal defects detected among the 650 pupils examined were as follows:—

			<i>Male.</i>	<i>Female.</i>	<i>Total.</i>
Subnormal Nutrition ...	...	...	9	3	12
Nose and Throat Defects:					
For observation ...	...	...	62	36	98
For treatment ...	...	...	5	9	14
Defective vision:					
For observation ...	...	...	85	55	140
For treatment ...	...	...	30	19	49
Defective hearing ...	...	...	7	4	11
Orthopaedic ...	...	...	21	27	58
Circulatory ...	...	...	7	6	13
Other conditions ...	...	...	12	6	18

Comparing these figures with those for the previous year, it is evident that there has been a definite fall in the proportion of undernourished children and practically the whole of this fall is caused by a drop in the proportion of undernourished boys. The high proportion of undernourished boys as compared with girls was the subject of comment in last year's report and it is gratifying to record an improvement in this respect. Even now the proportion of undernourished boys is higher than that of girls, but the figures will show the extent of the improvement. In 1935, there were 35 cases of undernourishment among the 464 boys examined, or 7.5 per cent., while in 1936 there were 9 cases out of 396 examined or 2.3 per cent. In the case of girls, there were 5 instances of undernourishment among 298 examinations in 1935, or 1.4 per cent, while in 1936 there were 3 instances of undernourishment in 254 examinations or 1.2 per cent. Thus the figure for girls has remained practically stationary, while that for boys has fallen to about one third of its former magnitude. Even so, the amount of undernourishment among the boys is approximately twice that among the girls.

The figures for undernourishment can be analysed still further as follows:—

	<i>Nutrition</i> A.	<i>Nutrition</i> B.	<i>Nutrition</i> C.	<i>Nutrition</i> D.
County High School for Boys	74	166	4	—
County High School for Girls	80	104	2	1
Soham Grammar School ...	21	49	4	—
Technical School (Boys) ...	22	55	1	—
Technical School (Girls) ...	26	41	—	—

It will be noted that there was one case where the nutrition had to be labelled as definitely bad, while in the previous year there were no such cases in the secondary schools. This case occurred in the County High School for Girls and may be regarded as having a definitely pathological basis, largely of a psychological character. It should be considered rather as unfairly burdening the figures at that school than as actually accentuating the amount of undernourishment there.

The figures quoted show that the highest percentage of undernourishment existed at Soham Grammar School (5.4 per cent.), the County High School for Boys and County High School for Girls showing an equal percentage of 1.6, the Boys' Technical 1.3 and the Girls' Technical nil.

On the other hand when the percentages of cases of excellent nutrition are compared, the County High School for Girls leads with 42.8 followed by the Girls' Technical with 38.8, the County High School for Boys 30.3, Soham Grammar School 28.4 and the Boys' Technical 28.2.

These figures seem to furnish definite confirmation of the opinion expressed in the report for 1935 to the effect that the nutritional state of girls attending secondary schools is better than that of boys at comparable ages and the superiority does not seem to be connected with one particular school. The possible reasons were fully discussed last year.

Turning to other defects, there seems to have been a definite drop in the number of cases of defective vision and defective hearing, but a considerable rise in the number of nose and throat defects and orthopædic defects. In the case of orthopædic defects especially, the increase seems relatively enormous. It is difficult to suggest any explanation and it remains to be seen whether the increase is of a permanent nature.

In addition to the foregoing routine examinations, 141 boys and 29 girls were re-examined because of defects previously noted. Of these it was found that 9 should be advised to have further treatment for defective vision and 11 for dental caries.

Dental inspection was carried out by the two County School Dentists and for the first time in the history of the school dental service every pupil in both secondary and technical schools (except at Soham Grammar School) present at the time of the examination was examined. The results of the examination may be summarised as under:—

	<i>Inspected.</i>	<i>Required Treatment.</i>	<i>Received Treatment.</i>
County High School for Boys	504	387	237
County High School for Girls	409	248	140
Soham Grammar School ...	89	31	20
Cambs. Technical School ...	189	55	20

The reason for the comparatively small number inspected at Soham Grammar School was the fact that the work was done before the arrival of the second dental surgeon and was carried out on similar lines to those of previous years. In future, however, the whole school will be inspected and treatment will be given to all accepting it.

It should be realised that the percentage accepting treatment has not the same significance as it has at elementary schools, as many pupils attending secondary schools are in a position to obtain treatment privately and, in fact, do so.

It will be observed that the numbers quoted represent a considerable volume of work and actually a very large proportion of Mr. Clements' time was occupied with the treatment of the County High Schools for Boys and Girls. The treatment was done very thoroughly and the results were obvious at the medical inspection which took place later in the year, when the condition of the teeth as compared with that found in the previous year showed an outstanding improvement. The effect will be that the treatment in succeeding years should not occupy so much time.

A point of interest is the fact that the greater part of the treatment of the County High School for Boys was carried out at the Shire Hall during the Easter holidays and that considerable numbers from both the High School for Boys and the High School for Girls have been treated at the Shire Hall on Saturday mornings.



## **Payment by Parents.**

Arrangements under this head have been as in former years.

## **Health Education.**

There is nothing to add to remarks made last year under this head. The visits of the Dental Board's lecturers have already been mentioned and were, of course, of great educational value. The Assistant Superintendent of the County Nursing Association has continued her lectures on mothercraft at Sawston Village College and the educational side of the regular work of the Public Health Department has been maintained through the usual agencies.

## **Miscellaneous.**

Special reports have been furnished regarding the fitness of teachers for duty and medical certificates furnished by 48 teachers on appointment have been advised upon. A large number of reports have also been furnished on the fitness of children for school attendance.

Special acknowledgement should be made to Dr. T. H. Harrison, the Assistant County Medical Officer, for the compilation of many of the figures on which this report is based, to the School Dental Surgeons, Mr. Evered and Mr. Clements, for their reports and statistics relating to dental treatment, to Dr. Paton Philip for much help and co-operation in connection with children suffering from suspected tuberculosis and related conditions, and to the clerical staff of the Public Health and Education Departments for ungrudging effort connected with the records necessary for the writing of the report.

R. FRENCH,  
*School Medical Officer.*

## Dental Inspection and Treatment.

Twenty-third Annual Report by Mr. J. C. G. Evered, L.D.S.,  
County School Dentist.

During 1936, children of all ages were dealt with in the schools of the County.

The year's work is set out in detail in the statistical tables appended to the School Medical Officer's report, but certain information may usefully be stated here in tabular form.

### 1. *Schools dealt with:*

A. Schools inspected and treated ... ..	95
B. Schools inspected only ... ..	12
C. Total schools visited (A + B) ... ..	107

### 2. *Children dealt with:*

A. In schools inspected and treated ... ..	5860
Required no treatment ... ..	2243
Required treatment ... ..	3617
Received treatment ... ..	2300
Refused treatment ... ..	1317
Temporary teeth extracted ... ..	3979
Permanent teeth extracted ... ..	529
Fillings ... ..	1847
B. In schools inspected only ... ..	737
Required no treatment ... ..	246
Required treatment ... ..	491
C. In total schools visited (A + B) ... ..	6597
Required no treatment ... ..	2489
Required treatment ... ..	4108
D. Special cases ... ..	89
Temporary teeth extracted ... ..	182
Permanent ,, ,, ... ..	24
Fillings ... ..	64

Of 6,597 who underwent routine dental inspection 2,489 or 37.7 per cent. required no treatment, while 4,108 or 62.3 per cent. did require it, being 7.4 per cent. higher than last year. This increase in the number requiring treatment is due to a more thorough inspection being carried out, which is now made possible by the appointments of another dentist and dental attendants.

It may also be noted that although I have only inspected 5,860 children, as compared with 7,081 last year, the number receiving treatment is very nearly the same, being 2,300 as compared with 2,409 last year.

In schools both inspected and treated during the year, of the 3,617 children requiring treatment, 63.5 per cent. received it, the parents refusing for the remaining 36.5 per cent., the percentages for last year being 62.9 per cent. and 37.1 per cent. respectively.

In 7 schools there were no refusals, and in 21 schools the refusals were under 5.

The numbers of temporary and permanent teeth extracted were 3,979, and 529 respectively, and 1,847 fillings were done.

It will be noticed that there is a slight decline in the number of refusals, and I am confident that in time, as parents realise the change in conditions of treatment, with the appointment of a trained attendant that they will still further decline.

With regard to accommodation and premises to work in, this could be greatly improved by the provision of a dental trailer. At present work is carried out in teachers' houses, village institutes, church halls, etc., and where the cookery or woodwork room at the school is used, this means a suspension of teaching of these subjects, in some cases for as long as a fortnight at a time. I do not consider the provision of a dental caravan in any way a luxury but an absolute necessity.

The following work was done at Secondary Schools (Soham Grammar School and Cambs. Technical School).

Number Inspected	...	...	278
Required Treatment	...	...	86
Received Treatment	...	...	40
Temporary Teeth Extracted	...	...	17
Permanent	„	„	25
Fillings	...	...	73
Sealings	...	...	10

I must again record my thanks to the teaching staff for the very cordial and valuable help they continue to give me in my work. I have noticed a marked reduction in the number of refusals in those schools where the teachers make a point of talking to the children about the importance of good teeth. Thanks are also due to the nursing staff for their work in interviewing the parents of children for whom treatment has been refused.

J. C. G. EVERED, L.D.S. (Ed.).



Annual Report of School Dental Surgeon, Mr. N. Gordon Clements,  
L.R.C.P.S., L.R.F.P.S., L.D.S.

I have pleasure in submitting this my first report, as school dental surgeon. The time covered is between February 1st and December 31st, 1936. Inspection and treatment have been given in both Elementary and Secondary Schools, and in both cases a gratifying response has been made. There is an increasing desire on the part of parents to allow their children to take advantage of the undeniable benefits of early dental treatment.

As we are all aware, at the present moment, there is on foot a great national urge towards a higher standard of physical fitness. This is excellent, but in my opinion as a dental surgeon, all the physical training in the world will be of no avail, until both parents and children are brought to realise the really serious consequences to health which result from neglect in the practice of regular dental hygiene.

The following figures relate to the work in elementary schools during the period.

1. *Schools dealt with:*

A. Schools inspected and treated	...	21
B. Schools inspected only	...	10
C. Total schools visited (A + B)	...	31

2. *Children dealt with:*

A. Schools inspected and treated	...	1790
Required no treatment	...	248
Required treatment	...	1542
Received treatment	...	991
Refused treatment	...	551
Temporary teeth extracted	...	1455
Permanent teeth extracted	...	244
Fillings	...	1166
B. In schools inspected only	...	581
Required no treatment	...	105
Required treatment	...	476
C. In total schools visited (A + B)	...	2371
Required no treatment	...	353
Required treatment	...	2018
D. Special Cases:		
Temporary teeth extracted	..	78
Permanent teeth extracted	...	10
Fillings	...	112

353 did not require treatment out of 2,371 inspected or 14.8 per cent.

2,018 did require treatment out of 2,371 inspected or 85.2 per cent.

During the year under discussion, treatment was made available for 1,542 of these, and 991, or 64.2 per cent., eventually accepted, giving a refusal rate of 35.8 per cent.

On the recommendation of the School Medical Officer several pre-school children were also treated.

After operating in different schools in the County, I found it desirable to give continued observation and treatment to several children. This was made possible by holding a clinic on Saturday morning, in the Shire Hall. The clinic commenced on 14th March, 1936, and throughout the year 68 sessions have been held, 36 on Saturday mornings, and the remainder during the Easter holidays, when boys from the County High School for Boys attended for treatment. I consider my Saturday morning clinic of the utmost importance in my work. Not only can I keep an eye on difficult cases, but I find from experience the psychological influence of a well-fitted surgery has its value on the mind of the child, and even more on the parent, who frequently attends. The attendance of children at the clinic has been excellent, 457 attendances having been made.

In most of the schools visited throughout the County, great difficulty has been found in obtaining suitable accommodation to carry out treatment. One way of getting out of the difficulty has been to crowd two classes together into one room. As this goes on, sometimes for more than a week, it must have a bad effect on the routine work of the school, and is without doubt an added burden on the teachers. It is with gratitude that I acknowledge my debt to headmasters and teachers, for much courtesy shown to me, and in many cases for enthusiastic help.

In some schools, dental treatment has been carried out in a store-room or in a private room hired for the purpose, and in most cases they have proved inadequate and unsuitable. The use of a travelling dental caravan, would greatly overcome the difficulties, and it is to be hoped that in the near future this will materialise.

The following figures relate to secondary schools:—

Total number inspected	...	...	913
Required no treatment	...	...	278
Required treatment	...	...	635
Received treatment	...	...	377
Temporary teeth extracted	...	...	112
Permanent teeth extracted	...	...	118
Fillings	...	...	580

278 children did not require treatment out of 913 inspected, or 30.4 per cent.

635 children did require treatment out of 913 inspected, or 69.6 per cent.

377 of these 635 requiring treatment were actually treated, or 59.3 per cent.

I should like to take the opportunity of thanking my dental attendant, and once more the teachers, for willing and valuable assistance, given to me in my work.

N. GORDON CLEMENTS, L.R.C.P.S., L.R.F.P.S., L.D.S.

TABLE II.

A.—Return of defects found in the course of Medical Inspection in 1936.

Defect or Disease.					Routine Inspections		Special Inspections	
					Number referred for Treatment.	Number requiring to be kept under observation, but not referred for Treatment.	Number referred for Treatment.	Number requiring to be kept under observation, but not referred for Treatment.
(1)					(2)	(3)	(4)	(5)
Skin.	Ringworm:							
	Head	...	...	...	—	4	1	—
	Body	...	...	...	2	3	—	—
	Scabies	...	...	...	1	1	2	1
	Impetigo	...	...	...	4	1	—	1
	Other Diseases (Non-Tubercular)	...	...	...	4	21	1	2
Eye.	Blepharitis	...	...	...	6	23	—	—
	Conjunctivitis	...	...	...	1	7	—	—
	Keratitis	...	...	...	—	—	—	—
	Corneal Opacities	...	...	...	—	—	—	—
	Other conditions	...	...	...	5	14	2	4
	Defective Vision	...	...	...	90	197	16	25
	Squint	...	...	...	12	28	2	7
Ear.	Defective Hearing	...	...	...	1	9	—	5
	Otitis Media	...	...	...	—	—	—	—
	Other Ear Diseases	...	...	...	6	14	1	5
Nose and Throat.	Enlarged Tonsils only	...	...	...	10	179	5	18
	Adenoids only	...	...	...	1	6	1	—
	Enlarged Tonsils & Adenoids	...	...	...	5	3	1	—
	Other conditions	...	...	...	14	378	4	20
Enlarged Cervical Glands (Non-Tubercular)					—	50	—	1
Defective Speech					1	11	—	4
Heart and Circulation.	Heart Disease:							
	Organic	...	...	...	—	4	—	—
	Functional	...	...	...	—	28	—	2
	Anæmia	...	...	...	1	5	—	1



Defect or Disease.					Routine Inspections		Special Inspections.	
(1)					Number referred for Treatment. (2)	Number requiring to be kept under obser- vation, but not re- ferred for Treatment. (3)	Number referred for Treatment. (4)	Number requiring to be kept under obser- vation, but not re- ferred for Treatment. (5)
Lungs.	Bronchitis ...	...	...	...	3	40	1	4
	Other Non-Tubercular Diseases				—	1	—	4
Tubercu- losis.	Pulmonary:							
	Definite	...	...	...	—	—	—	—
	Suspected	...	...	...	—	—	—	—
	Non-pulmonary:							
	Glands	...	...	...	—	2	—	—
	Other Bones and Joints	...	...	...	—	—	—	—
	Skin ..	...	...	...	—	—	—	—
	Other Forms	...	...	...	—	2	—	—
Nervous System.	Epilepsy	...	...	...	—	2	—	—
	Chorea	...	...	...	3	4	—	—
	Other Conditions	...	...	...	—	8	—	1
Deformi- ties.	Rickets	...	...	...	8	40	—	—
	Spinal Curvature	...	...	...	3	5	1	—
	Other Forms	...	...	...	11	42	6	3
Other Defects and Diseases ...					26	162	10	59
Total					218	1,294	54	169

TABLE II.

B.—Classification of the Nutrition of Children inspected during the year in the Routine Age Groups.

Age-groups	Number of Children Inspected	A (Excellent)		B (Normal)		C (Slightly subnormal)		D (Bad)	
		No.	%	No.	%	No.	%	No.	%
Entrants	927	152	16.397	671	72.384	102	11.003	2	.216
Second Age-group	986	153	15.517	695	70.487	138	13.996	—	—
Third Age-group	903	220	24.363	559	61.905	121	13.400	3	.332
Other Routine Inspections	16	3	18.75	13	81.25	—	—	—	—
Total	2832	528	18.644	1938	68.432	361	12.747	5	.177

TABLE I. Medical Inspections of Children attending Public Elementary Schools.

## A.—ROUTINE MEDICAL INSPECTIONS.

Number of inspections in the prescribed Groups.

Entrants	...	...	...	...	...	927
Second Age Group	...	...	...	...	...	986
Third Age Group	...	...	...	...	...	903

Total	...	...	...	...	...	2816
Number of other Routine Inspections	...	...	...	...	...	16

Grand Total ... .. 2832

## B.—OTHER INSPECTIONS.

Number of Special Inspections	...	...	...	...	317
Number of Re-Inspections	...	...	...	...	2052

Total ... .. 2369

## C.—CHILDREN FOUND TO REQUIRE TREATMENT.

Group.	For defective vision (excluding squint).	For all other conditions recorded in Table IIA.	Total.
Entrants ... ..	5	59	63
Second Age Group	42	62	101
Third Age Group	43	29	70
Total (Prescribed Groups)	90	150	234
Other Routine Inspections	—	—	—
Grand Total ...	90	150	234

TABLE III.—Return of all Exceptional Children in the Area.

*Blind Children.*

At Certified Schools for the Blind ...	...	...	...	...	1
At Public Elementary Schools	...	...	...	...	—
At other Institutions ...	...	...	...	...	—
At no School or Institution ...	...	...	...	...	—
Total	...	...	...	...	1

*Partially Sighted Children.*

At Certified Schools for the Blind ...	...	...	...	...	1
At Certified Schools for the Partially Sighted ...	...	...	...	...	—
At Public Elementary Schools.	...	...	...	...	1
At other Institutions ...	...	...	...	...	—
At no School or Institution ...	...	...	...	...	2
Total	...	...	...	...	4

*Deaf Children.*

At Certified Schools for the Deaf ...	...	...	...	...	4
At Public Elementary Schools	...	...	...	...	—
At other Institutions ...	...	...	...	...	—
At no School or Institution ...	...	...	...	...	—
Total	...	...	...	...	4

*Partially Deaf Children.*

At Certified Schools for the Deaf ...	...	...	...	...	1
At Certified Schools for the Partially Deaf	...	...	...	...	—
At Public Elementary Schools	...	...	...	...	—
At other Institutions	...	...	...	...	—
At no School or Institution ...	...	...	...	...	—
Total	...	...	...	...	1

*Mentally Defective Children (feeble-minded).*

At Certified Schools for Mentally Defective Children ...	...	...	...	...	4
At Public Elementary Schools	...	...	...	...	22
At other Institutions ...	...	...	...	...	—
At no School or Institution ...	...	...	...	...	—
Total	...	...	...	...	26

*Epileptic Children (severe).*

At Certified Special Schools	...	...	...	...	—
At Public Elementary Schools	...	...	...	...	—
At other Institutions ...	...	...	...	...	—
At no School or Institution ...	...	...	...	...	2
Total	...	...	...	...	2



*Physically Defective Children.*

(a) Tuberculous Children.

(i) Children suffering from Pulmonary Tuberculosis.				2
At Certified Special Schools	...	...	...	1
At Public Elementary Schools	...	...	...	—
At other Institutions	...	...	...	—
At no School or Institution	...	...	...	3
Total	...	...	...	3

(ii) Children suffering from Non-Pulmonary Tuberculosis.				2
At Certified Special Schools	...	...	...	34
At Public Elementary Schools	...	...	...	—
At other Institutions	...	...	...	1
At no School or Institution	...	...	...	37
Total	...	...	...	37

(b) Delicate Children.

At Certified Special Schools	...	...	...	—
At Public Elementary Schools	...	...	...	12
At other Institutions	...	...	...	—
At no School or Institution	...	...	...	—
Total	...	...	...	12

(c) Crippled Children.

At Certified Special Schools	...	...	...	1
At Public Elementary Schools	...	...	...	20
At other Institutions	...	...	...	—
At no School or Institution	...	...	...	3
Total	...	...	...	24

(d) Children with Heart Disease.

At Certified Special Schools	...	...	...	—
At Public Elementary Schools	...	...	...	3
At other Institutions	...	...	...	—
At no School or Institution	...	...	...	—
Total	...	...	...	3

*Children Suffering from Multiple Defects.*

Mental Deficiency and Epilepsy.

At Certified Special Schools	...	...	...	—
At Public Elementary Schools	...	...	...	—
At other Institutions	...	...	...	—
At no School or Institution	...	...	...	2
Total	...	...	...	2

Mental Deficiency, Epilepsy and Cripple.

At Certified Special Schools	...	...	...	—
At Public Elementary Schools	...	...	...	1
At other Institutions	...	...	...	—
At no School or Institution	...	...	...	—
Total	...	...	...	1

Mental Deficiency, Heart and Partially Sighted.

At Certified Special Schools	...	...	...	—
At Public Elementary Schools	...	...	...	—
At other Institutions	...	...	...	—
At no School or Institution	...	...	...	1
Total	...	...	...	1

TABLE IV.—Return of Defects Treated during the Year ended  
31st December, 1936.

TREATMENT TABLE.

GROUP I.—MINOR AILMENTS (EXCLUDING UNCLEANLINESS).

Disease or Defect.  (1)	Number of Defects treated, or under treatment during the year.		
	Under the Authority's Scheme. (2)	Otherwise. (3)	Total. (4)
Skin—			
Ringworm—Scalp			
X-Ray Treatment ...	—	—	—
Other Treatment ...	14	—	14
Ringworm—Body ... ..	7	1	8
Scabies ... ..	1	—	1
Impetigo ... ..	93	9	102
Other Skin Disease ...	16	5	21
Minor Eye Defects—			
(External and other, but excluding cases falling in Group II) ... ..	28	—	28
Minor Ear Defects ... ..	9	—	9
Miscellaneous—			
( <i>e.g.</i> , Minor Injuries, bruises, sores, chilblains, etc.) ...	5	—	5
Total ... ..	173	15	188

GROUP II.—DEFECTIVE VISION AND SQUINT (EXCLUDING MINOR EYE DEFECTS TREATED AS MINOR AILMENTS—GROUP I).

Defect or Disease.  (1)	Number of Defects Dealt with.		
	Under the Authority's Scheme.  (2)	Otherwise.  (3)	Total  (4)
Errors of Refraction (including Squint)	177	26	203
Other Defect or Disease of the eyes (excluding those recorded in Group I) ... ..	—	—	—
Total ...	177	26	203

Number of children for whom spectacles were prescribed:—

(a) Under the Authority's Scheme	...	161
(b) Otherwise ... ..	...	26
Total ...		187

Total number of children who obtained or received spectacles:—

(a) Under the Authority's Scheme	...	161
(b) Otherwise ... ..	...	26
Total ...		187

GROUP III.—TREATMENT OF DEFECTS OF NOSE AND THROAT.

Number of Defects.

Received Operative Treatment.												Received other Forms of Treatment.	Total Number Treated.
Under Authority's Scheme in Clinic or Hospital.				By Private Practit- ioner or Hospital apart from the Authority's Scheme				Total.					
(1)				(2)				(3)					
(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)	(i)	(ii)	(iii)	(iv)		
—	—	9	2	—	—	17		—	—	26	4	8	38

(i) Tonsils only. (ii) Adenoids only. (iii) Tonsils and adenoids.  
(iv) Other defects of the nose and throat.



# GROUP IV.—ORTHOPAEDIC AND POSTURAL DEFECTS.

Number of Children treated under the Authority's Scheme:

Residential treatment with education	...	...	...	—
Residential treatment without education	...	...	...	—
Non-residential treatment at an orthopaedic clinic	...	...	...	36

Number of Children treated otherwise:

Residential treatment with education	...	...	...	—
Residential treatment without education	...	...	...	—
Non-residential treatment at an orthopaedic clinic	...	...	...	8
Total number treated	...	...	...	44

Table V.—DENTAL INSPECTION AND TREATMENT.

(1) Number of children inspected by the Dentist:—					
(a) Routine Age-Groups	...	5	...	689	
		6	...	768	
		7	...	786	
		8	...	834	
		9	...	923	
		10	...	847	
		11	...	764	
		12	...	836	
		13	...	852	
		14	...	155	
					7454
(b) Specials	...	...	...		285
(c) Total (Routine and Specials).					7739
(2) Number found to require treatment	...	...	...		5160
(3) Number actually treated	...	...	...		3288
(4) Attendances made by children for treatment	...	...	...		5378
(5) Half-days devoted to (Inspection 146)					
		(Treatment 563)	Total	...	709
(6) Fillings (Permanent Teeth 2456)					
		(Temporary Teeth 553)	Total	...	3009
(7) Extractions (Permanent Teeth 773)					
		(Temporary Teeth 5425)	Total	...	6198
(8) Administrations of general anaesthetics for extractions	...				Nil.
(9) Other Operations (Permanent Teeth 457)					
		(Temporary Teeth 1258)	Total	...	1715

Table VI.—UNCLEANLINESS AND VERMINOUS CONDITIONS.

(i) Average number of visits per school made during the year by the School Nurses	...	...	...	—
(ii) Total number of examinations of children in the Schools by School Nurses	...	...	...	1376
(iii) Number of <i>individual</i> children found unclean	...			100
(iv) Number of <i>individual</i> children cleansed under Section 87 (2) and (3) of the Education Act, 1921				—
(v) Number of cases in which legal proceedings were taken:				
(a) Under the Education Act, 1921	...	...		—
(b) Under School Attendance Byelaws	...			1